

**ABSTRACT**

The present invention discloses a method for the removal of a number of molecular contaminants from surfaces within a device. A purge gas containing oxygen and/or water is introduced into the interior of the device, contacting at least a portion of the interior surfaces. A contaminated purge gas is produced by transferring a portion of the contamination from the interior surfaces into the purge gas. The contaminated purge gas is removed from the device and the process is continued until the contaminant concentration in the contaminated purge gas is below a predetermined level.